U.S. Patent Application No. 10/594,707 Amendment dated June 26, 2009

Reply to Office Action of April 27, 2009

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the application:

**LISTING OF CLAIMS:** 

1. (Previously presented) An isolated polynucleotide comprising a nucleotide sequence

selected from the group consisting of: (a) the nucleotide sequence set forth in SEQ ID NO: 1 (b)

a nucleotide sequence encoding a protein comprising the amino acid sequence set forth in SEQ

ID NO: 2, or (c) a nucleotide sequence complementary to a polynucleotide defined in (a) or (b).

2. (Withdrawn) A polynucleotide shown by the nucleotide sequence set forth in SEQ ID

NO: 3 or SEQ ID NO: 5, in the sequence listing, or by the complementary nucleotide sequence,

or a polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID

NO: 4 or SEQ ID NO: 6 in the sequence listing, or a polynucleotide shown by the

complementary nucleotide sequence of the polynucleotide.

3. (Withdrawn) A polynucleotide containing a polynucleotide shown by the nucleotide

sequence set forth in SEQ ID NO: 3, in the sequence listing or by the complementary nucleotide

sequence, or a polynucleotide containing a polynucleotide encoding a protein shown by the

amino acid sequence set forth in SEQ ID NO: 4, in the sequence listing, or a polynucleotide

shown by the complementary nucleotide sequence of the polynucleotide, wherein the

polynucleotide encodes a protein that accelerates the activation of Cdc42.

4. (Canceled)

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- 5. (Canceled)
- 6. (Currently amended) An isolated polynucleotide that hybridizes to the polynucleotide according to claim 1 under stringent conditions to a polynucleotide comprising a nucleotide sequence complementary to a nucleotide sequence selected from the group consisting of: a) the nucleotide sequence set forth in SEQ ID NO:1, and b) a nucleotide sequence encoding a protein comprising the amino acid sequence set forth in SEQ ID NO: 2, wherein the isolated polynucleotide encodes a protein that accelerates the activation of Cdc42.
- 7. (Previously presented) A recombinant vector containing the polynucleotide according to claim 1.
- 8. (Original) A transformant that has been transfected with the recombinant vector according to claim 7.
- 9. (Original) A transformant that has been transfected with the recombinant vector according to claim 7, and a recombinant vector containing a polynucleotide encoding Cdc42.
- 10. (Withdrawn) A protein shown by the amino acid sequence set forth in SEQ ID NO: 2, in the sequence listing.
- 11. (Withdrawn) A protein shown by the amino acid sequence set forth in SEQ ID NO: 4 or SEQ ID NO: 6, in the sequence listing.

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12. (Withdrawn) A protein encoded by the polynucleotide according to claim 3.

13. (Withdrawn) A method of producing the protein according to claim 10, comprising a

step of culturing the transformant that has been transfected with a recombinant vector containing

a polynucleotide shown by a polynucleotide encoding a protein shown by the amino acid

sequence set forth in SEQ ID NO: 2 in the sequence listing, or a polynucleotide shown by the

complementary nucleotide sequence of the polynucleotide.

14. (Withdrawn) An antibody that recognizes the protein according to claim 10.

15. (Withdrawn) A method of identifying a compound that inhibits the function of the

proteins according to claim 10, and/or the expression of the polynucleotides shown by a

polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 2

in the sequence listing or a polynucleotide shown by the complementary nucleotide sequence of

the polynucleotide, comprising detecting the presence, absence or change in the function and/or

the expression under conditions where the interaction of a compound with the protein and/or the

polynucleotide are allowed, and determining whether the compound inhibits the function of the

protein and/or the expression of the polynucleotide.

16. (Withdrawn) The method according to claim 15, wherein the function of the protein is a

function of binding to Cdc42 and/or a function of accelerating the activation of Cdc42.

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17. (Withdrawn) A method of identifying a compound that inhibits the function of the

protein according to claim 10 and/or the expression of a polynucleotide shown by a

polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 2

in the sequence listing, or a polynucleotide shown by the complementary nucleotide sequence of

the polynucleotide, comprising using at least one selected from the protein, a polynucleotide

shown by a polynucleotide encoding a protein shown by the amino acid sequence set forth in

SEQ ID NO: 2 in the sequence listing, or a polynucleotide shown by the complementary

nucleotide sequence of the polynucleotide, a recombinant vector containing said polynucleotide,

a transformant that has been transfected with the recombinant vector or an antibody that

recognizes said protein.

18. (Withdrawn) The method according to claim 17, wherein the function of the proteins is

a function of binding to Cdc42 and/or a function of accelerating the activation of Cdc42.

19. (Withdrawn) A method of determining whether a tissue specimen derived from a human

stomach tissue is a tissue derived from a human stomach tumor or not, comprising measuring an

amount of expression of the polynucleotide according to claim 1 in the tissue specimen.

20. (Withdrawn) The method according to claim 19, wherein the method determines that

the tissue specimen is a tissue derived from a human stomach tumor in the case when the amount

of expression of the polynucleotide according to claim 1 in the tissue specimen is 4.5 times

higher than that in a control tissue derived from normal human stomach tissue.

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- 21. (Withdrawn) An agent for preventing and/or treating a stomach tumor, comprising a compound that inhibits the function of the protein according to claim 10 and/or a compound that inhibits the expression of the polynucleotide shown by a polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 2 in the sequence listing, or a polynucleotide shown by the complementary nucleotide sequence of the polynucleotide, as an effective ingredient.
- 22. (Withdrawn) A method of preventing and/or treating a stomach tumor, comprising using a compound that inhibits the function of the protein according to claim 10 and/or a compound that inhibits the expression of the polynucleotide shown by a polynucleotide encoding a protein shown by the amino acid sequence set forth in SEQ ID NO: 2 in the sequence listing, or a polynucleotide shown by the complementary nucleotide sequence of the polynucleotide.
- 23. (Currently amended) A reagent kit comprising at least one selected from the group consisting of: (a) a polynucleotide encoding a protein comprising the amino acid sequence set forth in SEQ ID NO: 2; (b) a polynucleotide comprising a nucleotide sequence complementary to of the polynucleotide defined in (a); (c) a recombinant vector comprising said polynucleotide defined in (a) or (b); and (d) a transformant that has been transfected with the recombinant vector defined in (c).